CLAIM CONSTRUCTION CHART FOR CIVIL ACTION 6:12-CV-499-MHS-CMC
FOR BLUE SPIKE ASSERTED U.S. PATENTS 8,214,175; 7,949,494; 7,660,700; AND 7,346,472

U.S. Patent 8,214,175 (Asserted Claims, 8, 11, 12, 13, 15, 16, 17)				
Asserted Claims With Disputed Terms and Phrases	**Disputed Claim Terms and Phrases**	**Plaintiff's Proposed Construction**	**Defendants' Proposed Construction**	**Court's Construction**
8. A system, comprising: nontransitory memory comprising a database for storing a plurality of **digital reference signal abstracts**; at least one processor; wherein said at least one processor is programmed or structured to generate a **digital reference signal abstract** from a digital **reference signal** such that said **digital reference signal abstract** is **similar to** said digital **reference signal** and reduced in size compared to said **digital reference signal**; and wherein said at least one processor is programmed to store said **digital reference signal abstract** in said database as one of said plurality of **digital reference signal abstracts**; wherein said digital **reference signal** is a digital representation of one of a plurality of different **versions** of a visual work and a multimedia work, and wherein said at least one processor is programmed or	Digital	"a series of binary digits – 1's and 0's"	Plain and ordinary meaning.	

structured to generate said **digital reference signal abstract** from said **digital reference signal** so that said digital **reference signal** comprises **signal characteristic parameters that differentiate between said plurality of different versions of said visual work and said multimedia work**.				
11. A system, comprising: nontransitory memory comprising a database for storing a plurality of **digital reference signal abstracts**; at least one processor; wherein said at least one processor is programmed or structured to generate a **digital reference signal abstract** from a **digital reference signal** such that said **digital reference signal abstract** is **similar to** said **digital reference signal** and reduced in size compared to said **digital reference signal**; and wherein said at least one processor is programmed to store said **digital reference signal abstract** in said database as one of said plurality of **digital reference signal abstracts**; wherein said at least one processor is programmed or structured to compare a digital query signal abstract to said plurality of digital reference signal abstracts stored in said database to generate **a compare result**.	query signal '494 (1,11,20,29) '700 (1,10,40,49) '472 (3,4,8,11)	"a signal being monitored or analyzed"	"an uncompressed signal representing an entire work to be analyzed"	
	reference signal '494 (1,4,5,11,17,18, 20,29) '700 (1,6,7,8,10,40, 49) '472 (3,4,8,11)	"a signal that is being referenced"	"an uncompressed signal representing an entire work"	
	digital reference signal abstract	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	Digital reference signal abstract

	first digital reference signal abstract match recorder '175 (15)	No construction required	"an element used for counting, which corresponds to a particular Abstract"	
	signal characteristic parameters that differentiate between said plurality of different versions of said visual work and said multimedia work. '175 (8)	No construction required.	"parameters that characterize a signal that distinguish between multiple Versions of a single visual work and multimedia work"	
	similar to '175 (8,11,17)	No construction required.	Indefinite. To the extent the Court believes that this term is not indefinite, then Defendants propose: "looks or sounds the same as"	
12. The system of claim 11, wherein said compare result indicates no **match** between said digital query signal abstract to said plurality of digital reference signal abstracts stored in said database.	Signal	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the	

		respective art.	respective art.	
13. The system of claim 11, wherein said compare result indicates a **match** between said digital query signal abstract and a first digital reference signal abstracts of said plurality of digital reference signal abstracts stored in said database.	digital representation of one of a plurality of different versions of a visual work and a multimedia work	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	
15. The system of claim 11, wherein said memory further defines a **first digital reference signal abstract match recorder** recording a number of times said at least one processor determines a **match** between a **digital query signal abstract** and first **digital reference signal abstract** of said plurality of **digital reference signal abstracts** stored in said database.	Abstract '175 (8,11,12,13,15,16,17) '494 (1,5,11,17,20,21,29) '700 (1,6,7,10,11,40,49,50) '472 (3,4,8,11,12)	[no construction necessary] alternatively: "summary"[1]	**All Defendants (except Morpho Defendants)**[2] Indefinite. To the extent the Court finds this term definite, All Defendants (except Morpho Defendants) propose: "A data-reduced representation of a reference or query signal that is the smallest amount of data that can represent and differentiate two signals for a given predefined signal set and that retains a perceptual relationship with the original signal" **Morpho Defendants** Indefinite.	

[1] Plaintiff's first raised the alternative definition in its Reply brief. Defendants reserve their rights to address this issue at the claim construction hearing or move to strike this belated definition.

			To the extent the Court finds this term is definite, Morpho proposes: "a reduction that preserves an aesthetic quality of the original signal"	
16. The system of claim 12, wherein said at least one processor is **programmed or structured to use an algorithm to generate said digital reference signal abstract** from said digital **reference signal**; and **wherein said at least one processor is programmed or structured to use said algorithm to generate said digital query signal abstract** from said digital **query signal**.	First digital reference signal abstract	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	
17. A system, comprising: nontransitory memory comprising a database for storing a plurality of **digital reference signal abstracts**; at least one processor; wherein said at least one processor is programmed or structured to generate a **digital reference signal abstract** from a **digital reference signal** such that said **digital reference signal abstract** is **similar to** said **digital reference signal** and reduced in size compared to said **digital reference signal**; and wherein said at least one processor is programmed to store said **digital reference signal abstract** in said database	Recording	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	
	Query signal abstract	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the	

as one of said plurality of **digital reference signal abstracts**; wherein said wherein said at least one processor is programmed or structured to apply at least one of **psychoacoustic model and a psycho-visual model** to generate said **digital reference signal abstract** from said **digital reference signal**.		respective art.	respective art.	
	match '175 (12,13,15) '700 (1) '472 (3,4,8,11,12)	No construction required.	"an indistinguishable copy"	
	Version(s) of [a/the/said/"that one of said plurality of"] reference signal[s] '175 (8) '494 (1,11,29) '700 (1,6)	No construction required. Plaintiff objected to the Defendants' refusal to construe the term "version." Dkt 1674-1.	"multiple variations of a particular Reference Signal"	
	reduced in size '175 (8,11,17)	No construction required.	"compressed"	
	psycho-acoustic model '175 (17)	No construction required.	"model that determines acoustic parameters that are humanly-perceptible"	
	Psycho-visual model '175 (17)	No construction required.	"model that determines visual parameters that are humanly-perceptible"	
	A compare result '175 (11)	No construction required.	"data that indicates whether a Match between two Abstracts was found"	
	programmed or structured to use said algorithm to generate said digital query signal abstract from said digital query	No construction required.	Indefinite.	

	signal ’175 (16)			
	Programmed or structured to use an algorithm to generate said digital reference signal abstract from said digital reference signal. ’175 (16)	No construction required.	Indefinite.	

U.S. Patent 7,949,494 (Asserted Claims 1, 4, 5, 11, 17, 18, 20, 21, 22, 29)				
Asserted Claims With Disputed Terms and Phrases	**Disputed Claim Terms and Phrases**	**Plaintiff’s Proposed Construction**	**Defendants’ Proposed Construction**	**Court’s Construction**
1. A system for identifying at least one **reference signal** comprising: a first input that receives at least one **reference signal** to be identified; a first processor that creates an abstract of each reference signal input to said first processor through said first input wherein the **abstract** comprises **signal characteristic parameters configured to differentiate between versions of said reference signal**; at least one **reference database** for storing at least one abstract; a receiver that receives at least one query signal; a second processor that creates an	identifying	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	

abstract of said query signal received by said receiver, based on the parameters; and **a comparing device** that compares the created query signal abstract to the reference signal abstracts in the at least one database, each **abstract** in the at least one **reference database** corresponding to a **version** of a **reference signal**, to determine whether the query signal abstract **matches** any of the stored at least one **abstract** in the at least one **reference database**.				
4. The system of claim 1, wherein the **reference signals** comprise at least one of images, audio, video, and combinations thereof.	To be identified	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	[AGREED] Parties agreed that no construction is required given the ordinary meaning as understood by a person of ordinary skill in the respective art.	
	reference database '494 (1, 11, 21, 29) '700 (1) '472 (3,8,11)	"a database that contains references"	"a database containing Abstracts for a predefined set of Reference Signals"	
	reference signal '494 (1,4,5,11,17,	"a signal that is being referenced"	"an uncompressed signal representing an entire work"	

	18,20,29) '700 (1,6,7,8,10, 40,49) '472 (3,4,8,11)			
	signal characteristic parameters configured to differentiate between versions of said reference signal '494 (1)	No construction required given the length of this proposed phrase.	"parameters that characterize a signal that distinguish between multiple Versions of the same Reference Signal"	
	a comparing device that compares	[no construction necessary] Alternatively: a comparator[2] Not governed by §112¶6.	Means plus function. Function: comparing Structure: no structure or algorithm To the extent the Court determines this term is not means-plus-function, Defendants propose this term is indefinite.	

[2] Defendants object to Blue Spike first proposing "comparator" as its construction in this joint statement.

			To the extent the Court finds this term is not indefinite, Defendants propose: "A separate hardware component of the computerized system [that compares/ for comparing/ able to compare]".	
5. The system of claim 1, wherein the stored **abstracts** are derived from one of a cognitive feature or a perceptible characteristic of the associated **reference signals**.	Cognitive feature '494 (5)	[AGREED CONSTRUCTION] "a feature that is understood by a person"	[AGREED CONSTRUCTION] "a feature that is understood by a person"	
11. A system for analyzing and identifying at least one reference signal, comprising: a first input for receiving at least one reference signal to be identified, a first processor for creating an **abstract** of each reference signal received based on **perceptual characteristics representative of parameters to differentiate between versions of the reference signal**; a **reference database** for storing **abstracts** of each reference signal received in a database; a second input for receiving at least one	Perceptible characteristic '700 (8) '494 (5,18)	[AGREED CONSTRUCTION] "characteristic perceived by a person"	[AGREED CONSTRUCTION] "characteristic perceived by a person"	

query signal to be identified, a second processor for creating an **abstract** of the received query signal based on the parameters; and **a comparing device** for comparing an **abstract** of said received query signal to the abstracts stored in the database to determine if the **abstract** of said received **query signal** is **related to** any of the stored **abstracts**.				
17. The system of claim 11, wherein at least one **abstract** comprises **data describing a portion of the characteristics of its associated reference signal.**	Perceptual quality '700 (8) '494 (18)	[AGREED CONSTRUCTION] "quality perceived by a person"	[AGREED CONSTRUCTION] "quality perceived by a person"	
	perceptual characteristics representative of parameters to differentiate between versions of the reference signal '494 (11) '700 (40)	No construction required.	"Perceptual characteristics, which represent parameters, that distinguish multiple Versions of the same Reference Signal"	
	related to '494 (11) '700 (40)	No construction required.	"Matches"	
	data describing a portion of the characteristics of its	No construction required.	Indefinite. To the extent the Court	

	associated reference signal '700 (7) '494 (17)		believes that this term is not indefinite, then Defendants propose: "Information describing less than all of the signal characteristic parameters used to create the Abstract for its associated Reference Signal"	
	a comparing device for comparing	[no construction necessary] Alternatively: a comparator[3] Not governed by §112¶6.	Means plus function. Function: comparing Structure: no structure or algorithm To the extent the Court determines this term is not means-plus-function, Defendants propose this term is indefinite. To the extent the Court finds this term is not indefinite, Defendants propose:	

[3] Defendants object to Blue Spike first proposing "comparator" as its construction in this joint statement.

			"A separate hardware component of the computerized system [that compares/ for comparing/ able to compare]".	
18. The system of claim 17, wherein the characteristics of the reference signal being described comprise at least one of a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a **recognizable characteristic** or combinations thereof.	Cognitive characteristic '494 (18) '700 (8)	[AGREED CONSTRUCTION] "characteristic understood by a person"	[AGREED CONSTRUCTION] "characteristic understood by a person"	
	recognizable characteristic '494 (18) '700 (8)	No construction required.	"characteristic visually or aurally perceived by a person"	
	Subjective characteristic ('700, 8) ('494, 18)	[AGREED CONSTRUCTION] "characteristic perceived differently by different people"	[AGREED CONSTRUCTION] "characteristic perceived differently by different people"	
20. The system of claim 11, wherein the system further comprises a **security controller** for applying a **cryptographic protocol** to the **abstract** of said **reference signal**, said **query signal**, or				
	security controller that controls access to a secured area	No construction required.	Indefinite. To the extent the Court	

both said **reference signal** and said **query signal**.	’494 (20)		believes that this term is not indefinite, then Defendants propose: “a hardware device that prevents unauthorized access”	
	cryptographic protocol ’494 (20, 21) ’700 (10, 11, 49, 50)	No construction required.	“An agreed upon procedure for transforming data in order to secure it.”	
21. **The system of claim 20, wherein the cryptographic protocol is one of at least a <u>hash</u> or <u>digital signature</u> and further comprising storing the <u>hashed abstract</u> and/or digitally signed abstract in the reference database.**	The system of claim 20, wherein the cryptographic protocol is one of at least a hash or digital signature and further comprising storing the hashed abstract and/or digitally signed abstract in the reference database. ’494 (21) ’700 (11,50)	No construction required.	Indefinite.	
	hash ’494 (21) ’700 (11,50)	“A mathematical function that maps a bit string.”	“A mathematical transform that maps a bit string of arbitrary length to a fixed length bit string to achieve	

			uniqueness”	
	Digital signature ’494 (21) ’700 (11,50)	No construction required.	Indefinite. To the extent the Court believes that this term is not indefinite, then Defendants propose: “the result of a cryptographic transformation of data that, when applied to an Abstract, provides a mechanism for verifying origin authentication, data integrity and signatory non-repudiation”	
	hashed abstract ’494 (21) ’700 (11,50)	[AGREED] “data that results from performing a Hash on an Abstract”	[AGREED] “data that results from performing a Hash on an Abstract”	
22. **The system of claim 11, further comprising a transmitter for distributing at least one signal based on the comparison step**.	The system of claim 11, further comprising a transmitter for distributing at least one signal based on the comparison step. ’494 (22)	No construction required.	Indefinite.	
29. A system for determining whether a	Signal characteristic	No construction required.	“parameters that	